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PROJECT BOOKLETMAT1038 Applied Mathematics 10
Module 6**FOR STUDENT USE ONLY**

Date Assignment Submitted:

Time Spent on Assignment:

(If label is missing or incorrect)

Student File Number:

Module Number:

FOR OFFICE USE ONLY

Assigned

Teacher:

Assignment

Grading:

Graded by:

Date Assignment Received:

**Student's Questions
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Apply Module Label Here

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Please verify that preprinted label is for
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Teacher

INSTRUCTIONS FOR SUBMITTING THIS DISTANCE LEARNING PROJECT BOOKLET

When you are registered for certain distance learning courses, you are expected to submit completed projects for correction. Try to submit each project as soon as you complete it. Do not submit more than one Project Booklet in one subject at the same time. Before submitting your Project Booklet, please check the following:

- Is the project completed? If not, explain why.
- Has your work been reread to ensure accuracy in spelling and details?
- Is the booklet cover filled out and the correct module label attached?

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1. Postage Regulations

Do **not** enclose letters with your project or Project Booklets.

Send all letters in a separate envelope.

2. Postage Rates

Put your project or Project Booklet in an envelope and take it to the post office and have it weighed. Attach sufficient postage and seal the envelope. Project Booklets will travel faster if sufficient postage is used and if they are in large envelopes that do not exceed two centimetres in thickness.

FAXING

1. Project Booklets may be faxed to the school with which you are registered. Contact your teacher for the appropriate fax number.
2. All faxing costs are the responsibility of the sender.

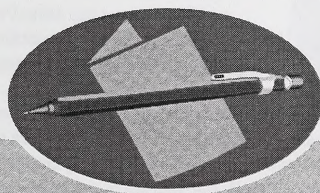
E-MAILING

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Applied Mathematics 10

Module 6

Trigonometry **ASSIGNMENT BOOKLET**



Learning
Technologies
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Alberta
LEARNING

FOR TEACHER'S USE ONLY

Summary

Total Possible Marks	Your Mark
60	

Teacher's Comments

Applied Mathematics 10
Module 6: Trigonometry
Assignment Booklet
Learning Technologies Branch
ISBN 0-7741-2166-1

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	
General Public	
Other	



You may find the following Internet sites useful:

- Alberta Learning, <http://www.learning.gov.ab.ca>
- Learning Technologies Branch, <http://www.learning.gov.ab.ca/lrb>
- Learning Resources Centre, <http://www.lrc.learning.gov.ab.ca>

The use of the Internet is optional. Exploring the electronic information superhighway can be educational and entertaining. However, be aware that these computer networks are not censored. Students may unintentionally or purposely find articles on the Internet that may be offensive or inappropriate. As well, the sources of information are not always cited and the content may not be accurate. Therefore, students may wish to confirm facts with a second source.

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PROJECT BOOKLET

APPLIED MATHEMATICS 10 – MODULE 6: TRIGONOMETRY

Read all parts of this project carefully and record your answers in the appropriate place. Work slowly and carefully. If you are having difficulties, go back and review the appropriate activity in the Student Module Booklet.

Be sure to complete all parts of the project and proofread your responses before submitting this project to your teacher for grading. If you require more room for any response, use your own paper and attach it securely to this booklet.

Your mark on this module will be determined by how well you do on the module project in this Project Booklet and the module assignment in the Assignment Booklet.

The value of each part of the module project is stated in the left margin of this booklet. The total value of the module project is 40 marks.

40

Module Project: Land Surveying

Your project for Module 6 is Land Surveying. This project involves surveying a plot of land and making a scale drawing of the boundaries of the plot and the location of key objects or structures.

The plot of land could be a portion of your schoolyard, front or back yard, a local playground, or a farmyard. You can create the boundaries of the plot by using stakes and ropes. Alternatively, you can use fences, curbs, sidewalks, paths, or buildings to define the outer boundaries of the plot of land. The edges of your plot of land should be straight, but the plot should not be rectangular.

On your chosen plot of land, there must be at least one object, such as a flagpole, tree, or power pole, that is too high to measure directly.

For the project, you will need a clinometer and a transit. You will also need a measuring tape or trundle wheel.

Follow the directions given on pages 328 and 329 of the textbook to make a clinometer and transit, and practise using these measuring devices.

- ⑦ 1. a. Calculate the height of one of the tall objects on your plot of land. Use the method described on page 330 of the textbook. Show your work.

- ③ b. You could have calculated the height of the tall object using only one right triangle. Describe a situation where the method used in question 1.a. would be useful. Include a diagram as a part of the description.

- 7
2. a. Calculate the height of another tall object on your plot of land. Use the method described on the bottom of page 369 and the top of page 370 of the textbook. Show your work.
- 3
- b. You could have calculated the height using only one right triangle. Describe a situation where the method used in question 2.a. would be useful. Include a diagram as part of the explanation.

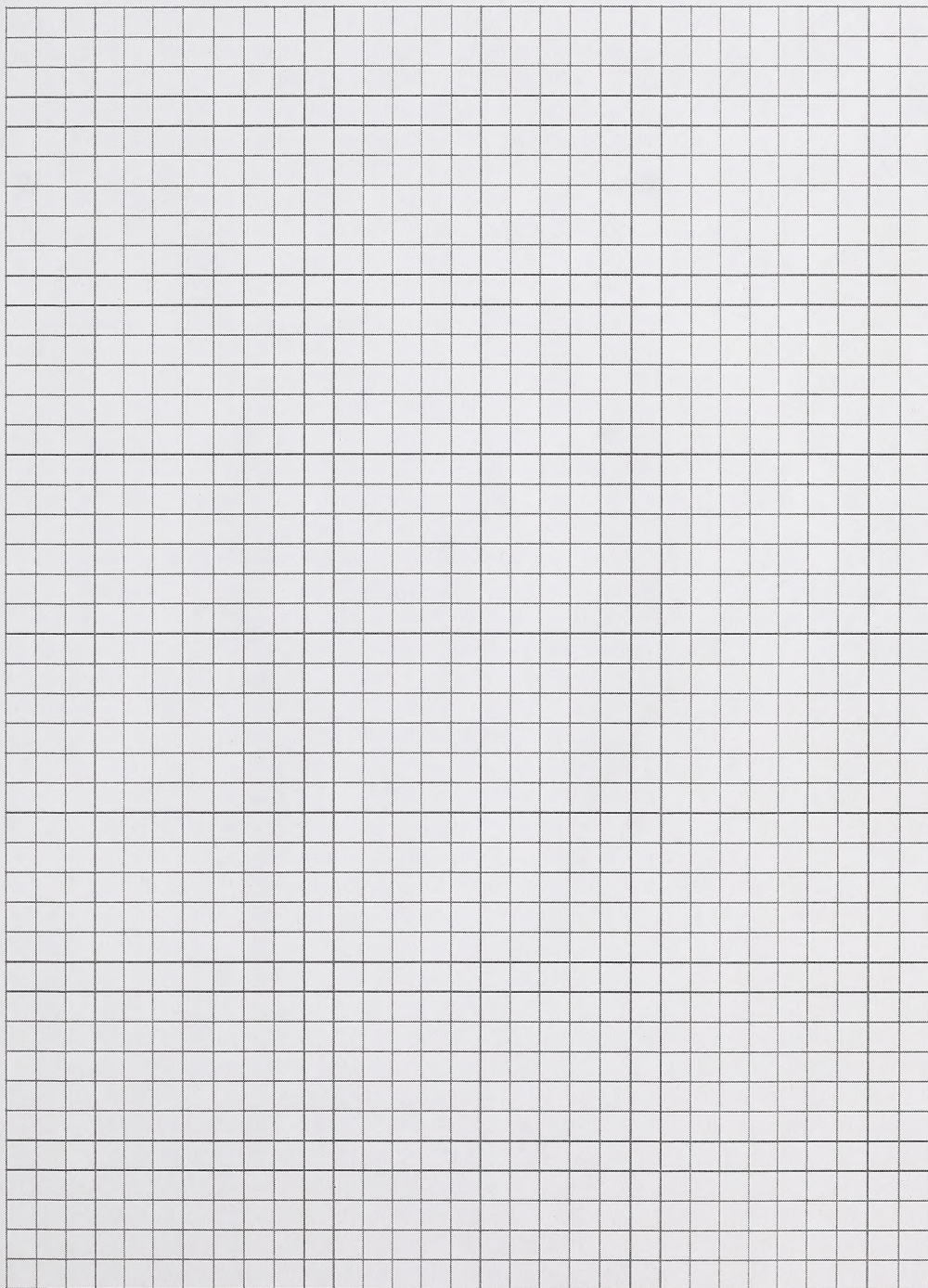
3. Measure the borders and angles of your chosen plot of land. Determine the position of any key objects or structures on the land.

5

- a. In the space provided, summarize the data you have collected.

10

b. Make a scale drawing of the plot of land on the given grid.



⑤

4. Write a summary report of what you learned from this project. Include how the surveying exercise applies to the mathematics you studied in this module.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper appears slightly aged or off-white. There is no handwriting or other markings on the page.

